

VINEBERG (H. N.)

Congenital Annular Stenosis of the Vagina

An Improved Method of Operating

BY

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NEW YORK

INSTRUCTOR IN GYNECOLOGY NEW YORK POST-GRADUATE SCHOOL OF MEDICINE AND
HOSPITAL; ATTENDING GYNECOLOGIST MOUNT SINAI HOSPITAL DISPEN-
SARY, AND MONTEFIORE HOME FOR CHRONIC INVALIDS

Reprinted from the MEDICAL RECORD, November 17, 1894



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CONGENITAL ANNULAR STENOSIS OF THE VAGINA—AN IMPROVED METHOD OF OPERATING.

ACQUIRED stenoses and atresias of the vagina are fairly common and have received considerable attention in literature; but not so the congenital stenoses of the vagina. The literature on the subject is very meagre. This, doubtless, is due, in part, to the looseness with which many authors employ the terms "atresia" and "stenosis." For instance, several authors speak of "incomplete atresia"—a solecism which should not occur in scientific medicine. Either an atresia (ἀτρησία, from ἀ, priv., and ἀτρησίς, a perforation) is complete or it does not exist at all. If there be an opening or a perforation, no matter how small, it is no longer a condition of atresia but of stenosis or stricture.

The meagreness of the literature on the subject of congenital stenosis may be judged from the circumstance that, in 1890, L. Kleinwächter² was able to collect only twenty published cases, and in only two of these was the annular stricture situated at the junction of the middle with the upper third of the vagina. In his paper he reports two cases in which the stricture was situated in this portion of the vagina. Ostermann and Odebrecht³ have each recently reported a similar case. A search through literature since 1890 has failed to find any other cases. These six cases, then, form the total number hitherto published. The two cases that I am about to report will

¹ Read before the Section on Obstetrics and Gynecology of the New York Academy of Medicine, May 24, 1894.

² Prag. Med. Woch., 1890, pp. 589-591.

³ Centrbl. für Gyn., 1894, No. 5, p. 123.

bring the number up to eight. I am loath to believe, however, that the condition is as rare as these figures would indicate. Many cases, no doubt, go unobserved. They are frequently overlooked because they may give rise to no symptoms. When the conditions interfere with marital intercourse, as in one of my cases, the woman may have her attention drawn to it and seek advice. In other instances it is found accidentally, as in my first case, when the physician makes a vaginal examination for some uterine disorder having no reference to the anomaly. In another class of cases the woman may seek advice on account of sterility (Kleinwächter).¹ In a further class of cases the condition is found at labor—Doleris,² Murphy,³ Hemmer,⁴ G. Braun,⁵ Heyder.⁶ But in the latter class of cases I am of the opinion that it is frequently overlooked. For unless the accoucheur made a very careful examination he would be likely to mistake the thick ring for an undilated os. As these rings often yield to the intermittent pressure of the head and the softening processes attending labor, the true condition would not be revealed.

CASE I.—A. A——, single, aged seventeen, was seen in consultation with my friend Dr. J. I. Metzger, March 19, 1893. Has had none of the diseases of childhood. At five years she had a vaginal discharge, which seemed so unnatural to her parents that they consulted a doctor about it. He made light of the matter, and it disappeared after a time. In her seventh year she had a similar discharge, and again in her twelfth year. Since then the discharge has continued about the same. In her thirteenth year she had typhoid fever, complicated by pneumonia, but made a good recovery. Apart from this she enjoyed good health until six months ago. Men-

¹ Loc. cit.

² Archives de Tocologie, 1886, No. 2, p. 135.

³ Meissner: Frauenzimmer Krankheiten, Bd. I., p. 327.

⁴ Neue Zeitschrift für Geburtskunde, Bd. IV., p. 3.

⁵ Centrbl. für Gyn., 1889, No. 7.

⁶ Archiv. für Gyn., 1889, Bd. XXXVI., p. 502.

struation set in when she was fourteen years of age, and was regular and painless from the outset. For the past six months has been complaining of pain in both groins, backache, and increased vaginal discharge. Exercise, particularly walking, made the pain in the groin worse.

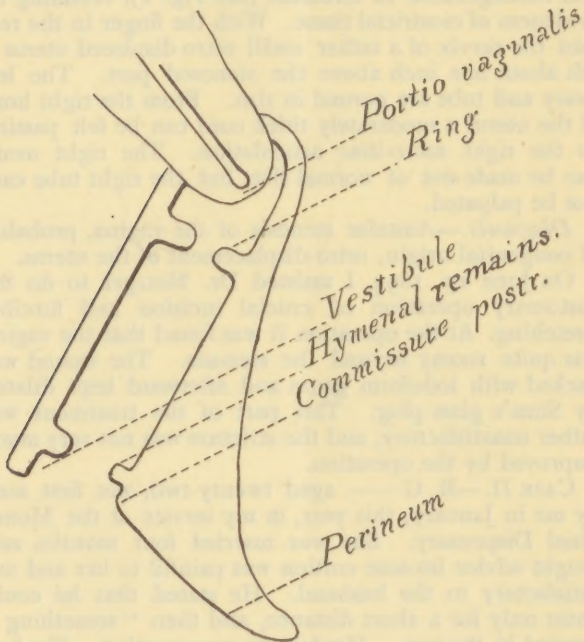


FIG. 1.

These pains were relieved during menstruation, which continued to be regular. Health otherwise fairly good.

She is a tall, slightly built girl, with small, undeveloped mammæ. The external genitals are normal, though rather undeveloped, the pubes is thinly covered with hair. The hymen is ruptured from previous exami-

nation. The examining finger comes into contact with a membranous ring at about the upper two-thirds of the vagina. In the centre of this ring is an opening barely admitting the point of the index-finger. The ring seems to be about one centimetre in thickness, and is smooth and homogeneous in structure (see Fig. 1), revealing no evidences of cicatricial tissue. With the finger in the rectum the cervix of a rather small retro-displaced uterus is felt about one inch above the stenosed part. The left ovary and tube are normal in size. From the right horn of the uterus a moderately thick cord can be felt passing to the right sacro-iliac articulation. The right ovary can be made out of normal size, but the right tube cannot be palpated.

Diagnosis.—Annular stenosis of the vagina, probably of congenital origin, retro-displacement of the uterus.

On June 15, 1893, I assisted Dr. Metzger to do the customary operation of crucial incision and forcible stretching. At the operation it was found that the vagina was quite roomy beyond the stenosis. The wound was packed with iodoform gauze and afterward kept dilated by Sims's glass plug. This part of the treatment was rather unsatisfactory, and the stricture was not very much improved by the operation.

CASE II.—B. G——, aged twenty-two, was first seen by me in January, this year, in my service at the Mount Sinai Dispensary. She was married four months, and sought advice because coition was painful to her and unsatisfactory to the husband. He stated that he could enter only for a short distance, and then "something" seemed in the way. Her history was negative. She had always been healthy as a girl, and never had any vaginal discharge. Had none of the diseases of childhood, as well as she could remember. She is a well-built, fully developed woman, mammæ and external genitals normal. At the junction of the middle with the upper third of the vagina a constriction is felt, formed by a membranous ring, in the centre of which is an opening just large

enough to admit the point of the index-finger. With the finger in the rectum a normal-sized uterus is felt, in ante-version, lying some distance above the constriction.

On January 22d, assisted by Drs. Rau and Brothers, I excised the ring with scissors, flush with the vagina, for

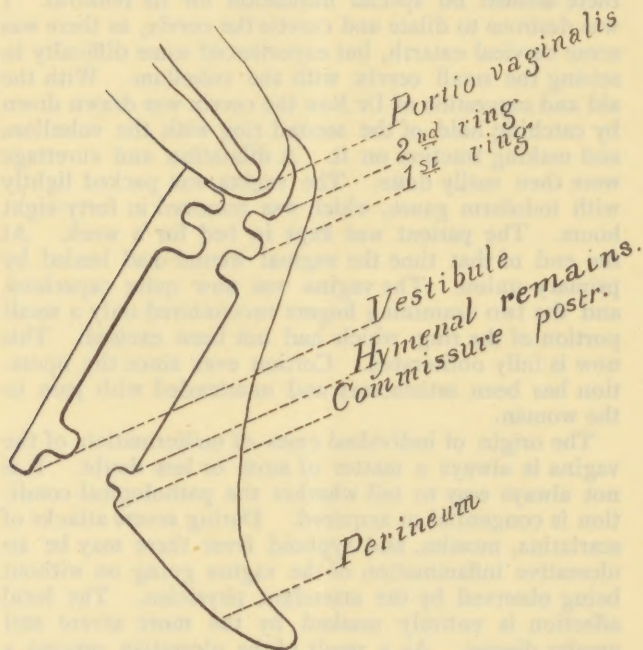


FIG. 2.

about three-quarters of its circumference, taking care not to injure the rectum. I then stitched the upper and lower edges of the vaginal mucous membrane by a continuous catgut suture. Beyond the first ring the vagina was funnel-shaped, and at about the level of the cervix was

a second ring, of larger calibre than the first, admitting the points of two fingers. The portio was very small and short, and the anterior lip seemed to be continuous with the second ring (see Fig. 2). I made one attempt to dilate this ring, but did not persevere in my efforts as there seemed no special indication for its removal. I was desirous to dilate and curette the cervix, as there was some cervical catarrh, but experienced some difficulty in seizing the small cervix with the volsellum. With the aid and suggestion of Dr Rau the cervix was drawn down by catching hold of the second ring with the volsellum and making traction on it. A dilatation and curettage were then easily done. The vagina was packed lightly with iodoform gauze, which was removed in forty-eight hours. The patient was kept in bed for a week. At the end of that time the vaginal wound had healed by primary union. The vagina was now quite capacious, and the two examining fingers encountered only a small portion of the ring, which had not been excised. This now is fully obliterated. Coition ever since the operation has been satisfactory and unattended with pain to the woman.

The origin of individual cases of malformation of the vagina is always a matter of more or less doubt. It is not always easy to tell whether the pathological condition is congenital or acquired. During severe attacks of scarlatina, measles, and typhoid fever there may be an ulcerative inflammation of the vagina going on without being observed by the attendant physician. The local affection is entirely masked by the more severe and greater disease. As a result of the ulcerative process a ring-like stenosis may form, which may be smooth and homogeneous, having all the characteristics of a congenital formation. It may be well to remember, however, that in children it is usually the vulva and the region external to the introitus that are affected with inflammatory diphtheritis and ulcerative processes.¹ This view of the mode

¹ Henoch : *Kinderkrankheiten*, Auf. IV. Berlin, 1889.

of origin of membranous stenosis of the vagina is based chiefly on what has been found to follow ulcerative processes in the vagina following labor. Some cases in multipara have been reported (Olshausen and Odebrecht¹) in which an annular constriction was found in the vagina, apparently showing no traces of cicatrization, and which, were it not for the prior history, might have been looked upon as of congenital origin.

Bearing all this in mind, and recognizing the difficulty in deciding in a given case whether it is congenital or acquired, I think it may be safely assumed that both of the cases reported to-night were congenital. In Case I. some doubt might arise, from the existence of a vaginal discharge at the age of five and seven years respectively. But this discharge was evidently no more severe than is frequently witnessed in young girls, and probably would not have excited the attention of the parents had it not been for its appearance at what appeared to them an unnatural age. A condition severe enough to be attended with an ulcerative process would not have been treated lightly by the doctor that had been consulted. In Case II. there seems to be no room for reasonable doubt. The patient had always been healthy as a girl, had had no severe illness, and had had no vaginal discharge. Still, the existence of a second ring, and a very small, poorly developed cervix would speak in favor of an ulcerative process. But this may have been, and no doubt was, of intra-uterine origin. In fact, Breisky² and others maintain that the cause of congenital vaginal stenosis is to be sought in foetal inflammatory processes, and that they probably most often occur during the later period of intra-uterine development. On the other hand, some other observers, notably Dohrn,³ hold that they develop in the same way as the hymen. A third

¹ ² Centralbl. für Gyn., 1894, No. 5.

² Cyclopædia of Obstetrics and Gynecology, vol. x., p. 255. William Wood & Co.

³ Über die Entwicklung des Hymen, Schriften der Gesell. für Beförderung der gesam. Naturwissen. zu Marburg, Bd. X.

theory is that they are due to anomalous development of Müller's ducts. Olshausen¹ claims that it is difficult to explain the origin of vaginal stenosis on the theory of an anomaly of development, and for this reason alone doubts their congenital origin.

The diagnosis offers but very little difficulty. The examining finger comes against a ring-like constriction in the upper part of the vagina, with an opening varying in size from a few millimetres in diameter to that which will admit the point of one or two fingers. An examination per rectum will reveal the cervix lying two or three centimetres above the constriction.

An apparent stenosis is not infrequently observed in pregnant women. It is situated in the upper part of the vagina, not far below the vault, and though the constriction may be considerable, it never offers an obstruction to labor. E. Martin already had called attention to it, and stated it was a constant occurrence in primiparæ at the sixth month of gestation (A. Martin,² Olshausen³). It is said to be produced by a pressing down of the vaginal vault, forming a duplicature of the vaginal wall.

The treatment usually adopted consists in forcibly rupturing the membranous ring, or making a crucial incision and stitching the torn or incised membrane together in the direction of the long axis of the vagina.¹ The crucial incision was the method followed in the first case, and seemed to me unsatisfactory in that it required considerable after-treatment with vaginal plugs to prevent recontraction and the immediate result was far from gratifying. It occurred to me in the second case that it would be better to excise the ring and stitch the upper and lower edges of the mucous membrane together, which I did. No after-dilatation was necessary, and the result was perfect. Union had taken place by primary intention. There was no constriction to be felt at the old site of the

¹ Loc. cit.

² Centrbl. für Gyn., 1894, No. 5, p. 125.

³ Ibid., p. 124.

stenosis excepting a small portion of the ring that had been left on the anterior wall. In a similar case I would excise the whole ring, though now in my case scarcely a trace of any constriction can be detected. In fact anyone examining the patient now for the first time would find some difficulty in locating the site of the former stenosis. The late C. C. Lee, in his excellent article on Vaginal Atresias, in the "American System of Gynecology,"¹ and, by the way, he also employs the paradoxical term "incomplete atresia," speaks of dissecting out the atresic bands. He followed this method in one case, but left the denuded surface to heal by granulation. "The process was slow, from the necessity of constantly maintaining effective dilatation, but by degrees it resulted in obtaining a perfectly formed vagina." In my search of the literature on the subject I find that Heyder,² in 1890, pursued very nearly the same course that I did. He divided the membranous ring into two by a Paquelin cautery, excised each half with the scissors, and brought the mucous membrane together by fine silk. Healing occurred in eight days. There was only a slight constriction to be felt afterward.

In cases where the stenosis is not too long, that is when its thickness is within moderate limits, excision of the constricting ring, with subsequent stitching of the upper and lower edges of the mucous membrane, forms, to my mind, the ideal method. The loss of blood may be reduced to a minimum by beginning with the continuous suture as soon as a small portion of the ring is excised, and following up the cutting with suturing. This plan I pursued in my case, and the hemorrhage was only trifling. By introducing a finger in the rectum and holding the urethra well up with a sound, there should be no danger of wounding either of these structures.

127 EAST SIXTY-FIRST STREET.

¹ American System of Gynecology, vol. ii., p. 27.

² Loc. cit.

